

ABSTRACT

A laser system comprising a laser for providing a laser beam, a non-linear optical crystal in the laser beam path creating a second order light, a laser beam expander in the beam path after the non-linear crystal, a dichromatic mirror in the beam path after the beam expander, an objective lens that focuses the laser beam on a sample and collects transmission from the sample before the sample transmission impacts the dichromatic mirror, a partial reflector of the second order light in the transmission path after the dichromatic mirror, and a coupler for coupling an optical component to the sample transmission.